=> fil reg

FILE 'REGISTRY' ENTERED AT 14:46:51 ON 25 SEP 2006
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STRUCTURE FILE UPDATES: 24 SEP 2006 HIGHEST RN 908332-13-8 DICTIONARY FILE UPDATES: 24 SEP 2006 HIGHEST RN 908332-13-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

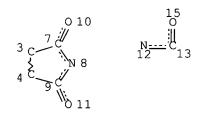
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> => d sta que 139 L11 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 4 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE L12 SCR 2043 L15 STR

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NODE ATTRIBUTES:
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DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 4

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

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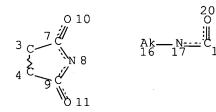
L19 1066 SEA FILE=REGISTRY SUB=L17 SSS FUL L11

L20 476 SEA FILE=REGISTRY ABB=ON PLU=ON L19 AND (C2H4O OR C3H6O OR

C4H8O OR C5H10O)

L21 114 SEA FILE=REGISTRY ABB=ON PLU=ON L20 AND S/ELS

L26 STR



NODE ATTRIBUTES:

CONNECT IS M3 RC AT 8

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS M3 C AT 16

GRAPH ATTRIBUTES:

RSPEC 8

NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L28 420 SEA FILE=REGISTRY SUB=L19 SSS FUL L26

L38 222 SEA FILE=REGISTRY ABB=ON PLU=ON L28 AND L20

L39 62 SEA FILE=REGISTRY ABB=ON PLU=ON L21 AND L38

=> d his

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FILE 'HCAPLUS' ENTERED AT 13:44:33 ON 25 SEP 2006

L1 2 S (US20060009590 OR US20040204548)/PN OR (US2005-091024# OR US2

E KOZLOWSKI/AU

L2 162 S E4-E7, E19, E21, E22

E GROSS/AU

L3 9 S E3

E GROSS R/AU

L4 481 S E3,E11

L5 5 S E51, E52

E MCMANUS/AU

E MCMANUS S/AU

L6 138 S E3, E5-E9

E MC MANUS/AU

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E NEKTAR/PA,CS
L7
            85 S E3-E34
\Gamma8
             2 S L1 AND L2-L7
               SEL RN
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            55 S E1-E55
L10
            29 S L9 AND NC4/ES
L11
               STR
L12
              SCR 2043
L13
            50 S L11 AND L12 SAM
L14
              STR L11
L15
              STR L11
L16
           50 S L15 AND L12
L17
        16423 S L15 AND L12 FUL
              SAV TEMP L17 RAB751/A
L18
            50 S L11 SAM SUB=L17
L19
          1066 S L11 FUL SUB=L17
               SAV TEMP L19 RAB751A/A
L20
           476 S L19 AND (C2H4O OR C3H6O OR C4H8O OR C5H10O)
L21
           114 S L20 AND S/ELS
L22
               STR L11
L23
             4 S L22 SAM SUB=L19
L24
              STR L22
L25
            43 S L24 SAM SUB=L19
L26
              STR L22
L27
           23 S L26 SAM SUB=L19
L28
           420 S L26 FUL SUB=L19
               SAV L28 TEMP RAB751B/A
L29
               STR L26
L30
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L31
            49 S L29 FUL SUB=L28
              SAV TEMP L31 RAB751C/A
L32
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              SAV TEMP L32 RAB751D/A
L33
            0 S L32 AND L31
L34
            17 S L32 AND L28
L35
           14 S L32 NOT L34
L36
           3 S L35 AND 1/NC
L37
            2 S L36 NOT 249621-30-5
L38
          222 S L28 AND L20
L39
           62 S L21 AND L38
L40
            1 S L39 AND "(C2H4O)NC18H32N2O8S"/MF
L41
          160 S L38 NOT L39
L42
           20 S L10 AND L19
L43
            4 S L42 AND L28
L44
            1 S L42 AND L31
L45
            0 S L42 AND L32
L46
            19 S L42-L44 NOT L40
L47
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L48
            10 S L46 AND 46.150.1/RID
              SEL RN 9 10
L49
            8 S L48 NOT E56-E57
L50
            10 S L40, L47, L49
L51
            10 S L42 NOT L50
               SAV TEMP L51 RAB751E/A
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FILE 'HCAOLD' ENTERED AT 14:42:38 ON 25 SEP 2006

FILE 'HCAPLUS' ENTERED AT 14:42:41 ON 25 SEP 2006

FILE 'USPATFULL' ENTERED AT 14:46:12 ON 25 SEP 2006

FILE 'REGISTRY' ENTERED AT 14:46:51 ON 25 SEP 2006

FILE 'HCAOLD' ENTERED AT 14:47:31 ON 25 SEP 2006 L52 0 S L50

FILE 'HCAPLUS' ENTERED AT 14:47:31 ON 25 SEP 2006

L53 2 S L50

L54 2 S L53 AND L1-L8

FILE 'USPATFULL' ENTERED AT 14:48:04 ON 25 SEP 2006 L55 2 S L50

FILE 'REGISTRY' ENTERED AT 14:48:12 ON 25 SEP 2006

=> d ide can tot 150

L50 ANSWER 1 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN **724722-86-5** REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[3-[[3-[[3-[[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

MF (C2 H4 O)n C18 H30 N2 O5 S

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

MeO
$$CH_2$$
 CH_2 $CH_$

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:140951

L50 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN **724722-83-2** REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[3-[[(trans)-4-[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]cyclohexyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MF (C2 H4 O)n C16 H26 N2 O5 S

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:140951

L50 ANSWER 3 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN **724722-80-9** REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[(trans)-4-[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

MF (C2 H4 O)n C17 H28 N2 O5 S

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

$$\label{eq:meometric} \mbox{MeO-} \begin{picture}(20,0) \put(0,0) \put(0,$$

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:140951

L50 ANSWER 4 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN **724722-77-4** REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[4-[[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -

methoxy- (9CI) (CA INDEX NAME)

MF (C2 H4 O)n C18 H30 N2 O5 S

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:140951

L50 ANSWER 5 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN **724722-75-2** REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[3-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MF (C2 H4 O)n C16 H24 N2 O4

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

2 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:129719

REFERENCE 2: 141:140951

L50 ANSWER 6 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN **724722-68-3** REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[3-[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

MF (C2 H4 O)n C14 H20 N2 O4

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

MeO
$$CH_2-CH_2-O$$
 n $CH_2-CH_2-CH_2-O$ NH

2 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:129719

REFERENCE 2: 141:140951

L50 ANSWER 7 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN **724722-58-1** REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

(C2 H4 O)n C15 H22 N2 O4

CI PMS

MF

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

2 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:129719

REFERENCE 2: 141:140951

L50 ANSWER 8 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN **724722-47-8** REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MF (C2 H4 O)n C16 H24 N2 O4

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

MeO
$$CH_2-CH_2-O$$
 $CH_2-CH_2-CH_2-CH_2$ CH_2-CH_2 CH_2-CH_2

2 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:129719

REFERENCE 2: 141:140951

L50 ANSWER 9 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN 724722-30-9 REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[15-[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy-(9CI) (CA INDEX NAME)

MF (C2 H4 O)n C18 H32 N2 O8 S

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A

PAGE 1-B

 $-CH_2$ OMe

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:140951

L50 ANSWER 10 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN

RN **724722-20-7** REGISTRY

ED Entered STN: 10 Aug 2004

CN Poly(oxy-1,2-ethanediyl), α -[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy- (9CI) (CA INDEX NAME)

MF (C2 H4 O)n C16 H26 N2 O7

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-B

$$-CH_2$$
 OMe

2 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:129719

REFERENCE 2: 141:140951

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FILE COVERS 1907 - 25 Sep 2006 VOL 145 ISS 14 FILE LAST UPDATED: 24 Sep 2006 (20060924/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitstr retable tot 154

L54 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2006:37101 HCAPLUS Full-text

DN 144:129719

TI Hydrolytically stable maleimide-terminated polymers

IN Kozlowski, Antoni; Gross, Remy F., III; McManus, Samuel P.

PA USA

SO U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U.S. Ser. No. 751,274. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
PI	US 2006009590	A1	20060112	US 2005-91024	20050325 <				
	US 2004204548	A1	20041014	US 2003-751274	20031231 <				
PRAI	US 2002-437211P	P	20021231	<					
	US 2003-751274	A2	20031231	<					
00	MADDAM 144 100710								

OS MARPAT 144:129719

AB The present invention is directed to hydrolytically stabilized maleimidefunctionalized water soluble polymers (e.g., polyethylene glycol derivs.) and to methods for making and utilizing such polymers and their precursors.

TT 724722-20-7DP, conjugate with 2-mercaptoethanol 724722-20-7P 724722-47-8DP, conjugate with 2-mercaptoethanol 724722-47-8P 724722-58-1DP, conjugate with 2-mercaptoethanol 724722-58-1P 724722-68-3DP, conjugate with 2-mercaptoethanol 724722-75-2DP, conjugate with 2-mercaptoethanol 724722-75-2P

RL: IMF (Industrial manufacture); PREP (Preparation) (hydrolytically stable maleimide-terminated polymers)

RN 724722-20-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy- (9CI) (CA INDEX NAME)

PAGE 1-B

$$-CH_2$$
 OMe

RN 724722-20-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy- (9CI) (CA INDEX NAME)

PAGE 1-B

$$-CH_2$$
 OMe

RN 724722-47-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO——
$$CH_2$$
— CH_2 — CH

RN 724722-47-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

RN 724722-58-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO
$$CH_2$$
 CH_2 $CH_$

RN 724722-58-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO—
$$\begin{bmatrix} -CH_2-CH_2-C \\ -DH_2-CH_2 \end{bmatrix}$$
 CH2— CH_2 CH2— CH

RN 724722-68-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

MeO
$$CH_2-CH_2-O$$
 $CH_2-CH_2-CH_2-CH_2$

RN 724722-75-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[3-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO
$$CH_2$$
 CH_2 $CH_$

RN 724722-75-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[3-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO
$$CH_2-CH_2-O$$
 $CH_2-CH_2-CH_2-CH_2-CH_2$ CH_2 CH_2 CH_2 CH_2

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ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
    2004:589588 HCAPLUS Full-text
DN
    141:140951
    Hydrolytically stable maleimide-terminated polymers and their preparation
TI
ΤN
    Kozlowski, Antoni; Gross, Remy F., III; McManus,
PΑ
    Nektar Therapeutics Al, Corporation, USA
SO
    PCT Int. Appl., 118 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 2
     PATENT NO.
                        KIND
                                           APPLICATION NO.
                               DATE
                                                                  DATE
                               -----
                                           -----
                                                                  _____
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                        A2
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                                           WO 2003-US41699
                                                                  20031231 <--
    WO 2004060965
                        A3
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            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
            NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
            TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
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                         A2
                               20050928
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                                                                  20031231 <--
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            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
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                                                                  20031231 <--
PRAI US 2002-437211P
                         Ρ
                               20021231
                                        <--
    WO 2003-US41699
                         W
                               20031231
                                        <--
GΙ
```

- AB The hydrolytically stabilized maleimide-functionalized water-soluble polymer I (POLY = water-soluble polymer segment; b = 0, 1; X = a hydrolytically stable linker containing ≥ 3 contiguous saturated carbon atom) is absent aromatic groups and ester linkages.
- IT 724722-30-9P 724722-47-8P 724722-58-1P 724722-68-3P 724722-77-4P 724722-80-9P 724722-83-2P 724722-86-5P

RL: IMF (Industrial manufacture); PREP (Preparation) (preparation of hydrolytically stable maleimide-terminated polymers)

RN 724722-30-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[15-[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy-(9CI) (CA INDEX NAME)

PAGE 1-B

$$-CH_2$$
 OMe

RN 724722-47-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO
$$CH_2-CH_2-O$$
 $CH_2-CH_2-CH_2-CH_2$ CH_2 CH_2

RN 724722-58-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[(trans)-4-(2,5-dihydro-2,5-dioxo-

1H-pyrrol-1-yl)cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

$$MeO \qquad \boxed{ CH_2-CH_2-O- \rceil_n CH_2-CH_2-C-NH-CH_2}$$

RN 724722-68-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

RN 724722-77-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[4-[[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

$$\label{eq:meometric} \text{MeO----} \text{CH}_2 - \text{$$

RN 724722-80-9 HCAPLUS

CN Poly(oxy-1,2-ethanediy1), α -[3-[[(trans)-4-[3-[(2-hydroxyethy1)thio]-2,5-dioxo-1-pyrrolidiny1]cyclohexy1]methy1]amino]-3-oxopropy1]- ω -methoxy- (9CI) (CA INDEX NAME)

MeO
$$CH_2$$
 CH_2 $CH_$

RN 724722-83-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[(trans)-4-[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]cyclohexyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

RN 724722-86-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[3-[[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

$$\label{eq:meometric} \begin{array}{c} \text{MeO} & \begin{array}{c} \begin{array}{c} \\ \\ \end{array} \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH}_2 - \text{$$

IT 724722-20-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of hydrolytically stable maleimide-terminated polymers)

RN 724722-20-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy- (9CI) (CA INDEX NAME)

PAGE 1-B

$$-CH_2$$
 OMe

IT **724722-75-2**

RL: TEM (Technical or engineered material use); USES (Uses) (preparation of hydrolytically stable maleimide-terminated polymers)

RN 724722-75-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[3-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

$$MeO - \begin{bmatrix} CH_2 - CH_2 -$$

=> fil uspatful FILE 'USPATFULL' ENTERED AT 14:49:09 ON 25 SEP 2006 CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 21 Sep 2006 (20060921/PD)
FILE LAST UPDATED: 21 Sep 2006 (20060921/ED)
HIGHEST GRANTED PATENT NUMBER: US7111325
HIGHEST APPLICATION PUBLICATION NUMBER: US2006212984
CA INDEXING IS CURRENT THROUGH 21 Sep 2006 (20060921/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 21 Sep 2006 (20060921/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

=> d bib abs hitstr tot 155

```
L55
   ANSWER 1 OF 2 USPATFULL on STN
      2006:10736 USPATFULL Full-text
ΑN
ΤI
      Hydrolytically stable maleimide-terminated polymers
ΙN
      Kozlowski, Antoni, Huntsville, AL, UNITED STATES
      Gross, Remy F. III, Petaluma, CA, UNITED STATES
      McManus, Samuel P., Brevard, NC, UNITED STATES
PΙ
      US 2006009590
                          Α1
                               20060112
ΑI
      US 2005-91024
                          A1
                               20050325 (11)
RLI
      Continuation-in-part of Ser. No. US 2003-751274, filed on 31 Dec 2003,
      PENDING
PRAI
      US 2002-437211P
                           20021231 (60)
DΤ
      Utility
FS
      APPLICATION
LREP
      NEKTAR THERAPEUTICS, 150 INDUSTRIAL ROAD, SAN CARLOS, CA, 94070, US
CLMN
      Number of Claims: 44
ECL
      Exemplary Claim: 1-105
DRWN
      3 Drawing Page(s)
LN.CNT 2972
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       The present invention is directed to hydrolytically stabilized maleimide-
       functionalized water soluble polymers and to methods for making and utilizing
       such polymers and their precursors.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
   724722-20-7DP, conjugate with 2-mercaptoethanol
     724722-20-7P 724722-47-8DP, conjugate with
```

2-mercaptoethanol 724722-47-8P 724722-58-1DP, conjugate with 2-mercaptoethanol 724722-58-1P 724722-68-3DP, conjugate with 2-mercaptoethanol 724722-75-2DP, conjugate with 2-mercaptoethanol 724722-75-2P

(hydrolytically stable maleimide-terminated polymers)

RN 724722-20-7 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 724722-20-7 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy- (9CI) (CA INDEX NAME)

PAGE 1-B

$$-CH_2$$
 OMe

RN 724722-47-8 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO
$$CH_2-CH_2-O$$
 $CH_2-CH_2-CH_2-CH_2-CH_2$ CH_2 CH_2

RN 724722-47-8 USPATFULL

CN Poly(oxy-1,2-ethanediy1), α -[3-[[[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

RN 724722-58-1 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO
$$CH_2-CH_2-O$$
 $CH_2-CH_2-CH_2-CH_2$ $CH_2-CH_2-CH_2-CH_2$

RN 724722-58-1 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

$$MeO = \begin{bmatrix} CH_2 - CH_2 -$$

RN 724722-68-3 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

RN 724722-75-2 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[3-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO
$$CH_2$$
 CH_2 $CH_$

RN 724722-75-2 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[3-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

L55 ANSWER 2 OF 2 USPATFULL on STN 2004:262046 USPATFULL Full-text ΑN ΤI Hydrolytically stable maleimide-terminated polymers IN Kozlowski, Antoni, Huntsville, AL, UNITED STATES Gross, Remy F., III, Huntsville, AL, UNITED STATES McManus, Samuel P., Brevard, NC, UNITED STATES PΙ US 2004204548 Α1 20041014 ΑI US 2003-751274 Α1 20031231 (10) PRAI US 2002-437211P 20021231 (60) DTUtility

FS APPLICATION

LREP NEKTAR THERAPEUTICS, 150 INDUSTRIAL ROAD, SAN CARLOS, CA, 94070

CLMN Number of Claims: 130 ECL Exemplary Claim: 1 DRWN 3 Drawing Page(s)

LN.CNT 3229

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to hydrolytically stabilized maleimide-functionalized water soluble polymers and to methods for making and utilizing such polymers and their precursors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 724722-30-9P 724722-47-8P 724722-58-1P

724722-68-3P 724722-77-4P 724722-80-9P

724722-83-2P 724722-86-5P

(preparation of hydrolytically stable maleimide-terminated polymers)

RN 724722-30-9 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[15-[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy-(9CI) (CA INDEX NAME)

PAGE 1-B

$$-CH_2$$
 OMe

RN 724722-47-8 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO
$$CH_2-CH_2-O$$
 $CH_2-CH_2-CH_2-CH_2-CH_2$ CH_2 CH_2

RN 724722-58-1 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

RN 724722-68-3 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[(trans)-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)cyclohexyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

$$MeO \qquad \boxed{ CH_2-CH_2-O \qquad } CH_2-CH_2-C-NH$$

RN 724722-77-4 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[4-[[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[(trans)-4-[3-[(2hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]cyclohexyl]methyl]amino]-3oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

$$\label{eq:meometric} \text{MeO-} \boxed{ \text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2} \\ \text{S-} \text{CH}_2-\text{CH}_2-\text{OH}_2-\text{CH}_2-\text{OH}_2-\text{C$$

RN 724722-83-2 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[(trans)-4-[3-[(2-hydroxyethyl)thio]-2,5-dioxo-1-pyrrolidinyl]cyclohexyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

RN 724722-86-5 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[3-[(2-hydroxyethyl)thio]-2,5dioxo-1-pyrrolidinyl]methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy- (9CI) (CA INDEX NAME)

(preparation of hydrolytically stable maleimide-terminated polymers) RN 724722-20-7 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxo-6,9,12-trioxa-2-azapentadec-1-yl]- ω -methoxy- (9CI) (CA INDEX NAME)

PAGE 1-B

IT 724722-75-2

(preparation of hydrolytically stable maleimide-terminated polymers) RN 724722-75-2 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[3-[[[3-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]methyl]amino]-3-oxopropyl]- ω -methoxy-(9CI) (CA INDEX NAME)

MeO
$$CH_2$$
 CH_2 O CH_2 CH_2 CH_3 CH_4 CH_2 CH_4 O O O

=> => fil reg FILE 'REGISTRY' ENTERED AT 14:56:33 ON 25 SEP 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 24 SEP 2006 HIGHEST RN 908332-13-8 DICTIONARY FILE UPDATES: 24 SEP 2006 HIGHEST RN 908332-13-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d ide can tot 160

L60 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2006 ACS on STN

RN 880551-82-6 REGISTRY

ED Entered STN: 17 Apr 2006

CN Octanamide, N-[4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)butyl]2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, polymer with 1-octadecene, alternating (9CI) (CA INDEX NAME)

MF (C18 H36 . C16 H11 F15 N2 O3) x

CI PMS

PCT Polyolefin, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 880551-80-4 CMF C16 H11 F15 N2 O3

CM 2

CRN 112-88-9 CMF C18 H36

 $H_2C = CH - (CH_2)15 - Me$

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:332070

L60 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2006 ACS on STN

```
RN
    880551-81-5 REGISTRY
ED
    Entered STN: 17 Apr 2006
CN
     Octanamide, N-[4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)butyl]-
     2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, polymer with ethene,
     alternating (9CI) (CA INDEX NAME)
     (C16 H11 F15 N2 O3 . C2 H4)x
MF
CI
PCT
    Polyolefin, Polyvinyl
SR
LC
     STN Files: CA, CAPLUS
     CM
          1
     CRN 880551-80-4
     CMF C16 H11 F15 N2 O3
```

CM 2

CRN 74-85-1 CMF C2 H4

 $H_2C = CH_2$

LC

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:332070

STN Files:

CA, CAPLUS

L60 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2006 ACS on STN RN 871133-41-4 REGISTRY ED Entered STN: 04 Jan 2006 CNPoly(oxy-1,2-ethanediyl), α -[2-[(23-carboxytricosyl)amino]-2oxoethyl]- ω -[2-[[4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1yl)butyl]amino]-2-oxoethoxy]- (9CI) (CA INDEX NAME) (C2 H4 O)n C36 H63 N3 O7 MF CI **PMS** PCT Polyether SR CA

$$(CH_2)_4 - NH - C - CH_2 - O - CH_2 - CH_2 - O - nH - CH_2 - CH_2 - O - nH_2 - O -$$

PAGE 1-B

- (CH2)23-CO2H

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:51444

L60 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2006 ACS on STN

RN 869587-21-3 REGISTRY

ED Entered STN: 08 Dec 2005

CN Maltodextrin, [5-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)pentyl]carbamate, polymer with 7-methyl-N-[3-[(2-methyl-1-oxo-2-propenyl)amino]propyl]-9-oxo-9H-thioxanthene-3-carboxamide and 2-propenamide (9CI) (CA INDEX NAME)

MF (C22 H22 N2 O3 S . C10 H14 N2 O4 . C3 H5 N O . x Unspecified) x

CI PMS

PCT Manual component, Polyacrylic, Polyother, Polyvinyl

SR CF

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 244202-41-3 CMF C22 H22 N2 O3 S

CM 2

CRN 79-06-1 CMF C3 H5 N O

CM 3

CRN 869587-19-9

CMF C10 H14 N2 O4 . x Unspecified

CM 4

CRN 869587-18-8 CMF C10 H14 N2 O4

CM 5

CRN 9050-36-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:483236

L60 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2006 ACS on STN

RN 869587-19-9 REGISTRY

ED Entered STN: 08 Dec 2005

CN Maltodextrin, [5-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)pentyl]carbamate (9CI) (CA INDEX NAME)

MF C10 H14 N2 O4 . x Unspecified

CI COM

PCT Manual registration

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 869587-18-8 CMF C10 H14 N2 O4

CRN 9050-36-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:483236

L60 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2006 ACS on STN

RN 479421-81-3 REGISTRY

ED Entered STN: 17 Jan 2003

CN Poly(oxy-1,2-ethanediyl), α,α' -[[(1 α ,3 α ,5 α)-5-[[[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)propyl]amino]carbonyl]oxy]m ethyl]-1,3-cyclohexanediyl]bis(methyleneoxycarbonylimino-3,1-

propanediyl)]bis[ω -methoxy- (9CI) (CA INDEX NAME)

MF (C2 H4 O)n (C2 H4 O)n C27 H44 N4 O10

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS

PAGE 1-B

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:78455

L60 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2006 ACS on STN

RN 445389-35-5 REGISTRY

ED Entered STN: 29 Aug 2002

CN Poly(oxy-1,2-ethanediyl), α -hydro- ω -methoxy-, ether with 2-[[[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)propyl]amino]carbonyl]oxy]m ethyl]-2-[[[[(3-hydroxypropyl)amino]carbonyl]oxy]methyl]-1,3-propanediyl bis[(3-hydroxypropyl)carbamate] (3:1) (9CI) (CA INDEX NAME)

MF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C28 H47 N5 O13

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-B

$$CH_2$$
 OMe CH_2 CH_2 OMe OMe OMe OMe OMe

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:78455

REFERENCE 2: 137:159338

L60 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2006 ACS on STN

RN **348098-39-5** REGISTRY

ED Entered STN: 25 Jul 2001

CN Poly(oxy-1,2-ethanediyl), α,α' -[[(1 α ,3 α ,5 α)-5-[2-[[[4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)butyl]amino]carbonyl]oxy]ethyl]-1,3-cyclohexanediyl]bis(2,1-ethanediyloxycarbonylimino-3,1-propanediyl)]bis[ω -methoxy-(9CI)(CA INDEX NAME)

MF (C2 H4 O)n (C2 H4 O)n C31 H52 N4 O10

CI PMS

PCT Polyether

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-B

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:87194

L60 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2006 ACS on STN

RN 183149-96-4 REGISTRY

ED Entered STN: 19 Nov 1996

CN Cellulose, [3-(2,5-dihydro-3,4-dimethyl-2,5-dioxo-1H-pyrrol-1-yl)propyl]carbamate (9CI) (CA INDEX NAME)

MF C10 H14 N2 O4 . x Unspecified

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 183149-95-3 CMF C10 H14 N2 O4

CM 2

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 125:315844

=> fil hcaplus uspatful FILE 'HCAPLUS' ENTERED AT 14:57:49 ON 25 SEP 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 14:57:49 ON 25 SEP 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitstr retable tot 168

L68 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:5795 HCAPLUS Full-text

DN 138:78455

TI Ointments containing polyalkylene glycol derivative-modified biologically active polypeptides

IN Yamasaki, Motoo; Suzawa, Toshiyuki; Murakami, Tatsuya; Sakurai, Noriko

PA Kyowa Hakko Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 165 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.					KIND DATE			i	APPLICATION NO.					DATE				
ΡI	WO	0 2003000278			A1 20030103			WO 2002-JP6227					20020621 <						
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	
			UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
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			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
PRAI	JΡ	2001	-190	330		Α		2001	0622	<	_								

Disclosed are ointments containing a chemical modified physiol. active polypeptide, wherein the chemical modified physiol. active polypeptide is exemplified by a physiol. active polypeptide chemical modified with at least one polyalkylene glycol, and the physiol. active polypeptide to be chemical modified is exemplified by superoxide dismutase, interferon- α , interferon- β , interferon- γ and granulocyte colony-stimulating factor. A polyethylene glycol cyclohexane derivative was prepared, and its N-hydroxysucinimide ester was reacted with recombinant human interferon- β . The modified interferon- β showed excellent antivirus activity in FL cells. Also, an ointment containing modified interferon- β -containing ointment.

IT 479421-81-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of polyalkylene glycol derivative-modified biol. active polypeptides for ointments)

RN 479421-81-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α,α' -[[(1 α ,3 α ,5 α)-5-[[[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)propyl]amino]carbonyl]methyl]-1,3-cyclohexanediyl]bis(methyleneoxycarbonylimino-3,1-propanediyl)]bis[ω -methoxy-(9CI) (CA INDEX NAME)

PAGE 1-B

$$-NH - (CH2) 3 - CH2 - CH2 - CH2 - OMe$$

IT 445389-35-5DP, conjugates with polypeptides 445389-35-5P 479421-81-3DP, conjugates with polypeptides

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of polyalkylene glycol derivative-modified biol. active polypeptides for ointments)

RN 445389-35-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -hydro- ω -methoxy-, ether with 2-[[[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)propyl]amino]carbonyl]oxy]m ethyl]-2-[[[[(3-hydroxypropyl)amino]carbonyl]oxy]methyl]-1,3-propanediyl bis[(3-hydroxypropyl)carbamate] (3:1) (9CI) (CA INDEX NAME)

PAGE 1-B

$$-CH_2$$
 OMe
 $-CH_2$ OMe
 $-CH_2$ OMe
 $-CH_2$ OMe

RN 445389-35-5 HCAPLUS

CN Poly(oxy-1,2-ethanediy1), α -hydro- ω -methoxy-, ether with 2-[[[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)propyl]amino]carbonyl]oxy]m ethyl]-2-[[[[(3-hydroxypropyl)amino]carbonyl]oxy]methyl]-1,3-propanediyl bis[(3-hydroxypropyl)carbamate] (3:1) (9CI) (CA INDEX NAME)

$$CH_2$$
 OMe CH_2 CH_2 OMe CH_2 OMe OMe

RN 479421-81-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α,α' -[[(1 α ,3 α ,5 α)-5-[[[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)propyl]amino]carbonyl]methyl]-1,3-cyclohexanediyl]bis(methyleneoxycarbonylimino-3,1-propanediyl)]bis[ω -methoxy- (9CI) (CA INDEX NAME)

PAGE 1-B

$$-NH-(CH2)3 - CH2 - CH2 - CH2 - OMe$$

RETABLE

Referenced Author (RAU)	Year (RPY)	(RVL)	(RPG)	, ,	Referenced File
Asahi Chemical Industry	1995			JP 07-118165 A	HCAPLUS
Cetus Corp Cetus Corp	1987 1987			EP 229108 A1 JP 62-503171 A	HCAPLUS
F Hoffman-La Roche Ag	1 1			JJP 06-192300 A	 HCAPLUS
F Hoffman-La Roche Ag				EP 593868 A1	HCAPLUS
Johnson & Johnson Medic		ĺ		WO 00033893 A1	HCAPLUS
Johnson & Johnson Medic	: 2000	I		EP 1053029 A1	HCAPLUS

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Johnson & Johnson Medic|2000 |
                                  - 1
                                         IJP 2002531532 A
                                       |JP 01-85934 A
Takara Shuzo Kabushiki | 1989 |
                                 |
Takeda Chemical Industr | 1987 |
                                         |EP 210761 A1
                                   -
                                                               | HCAPLUS
Takeda Chemical Industr | 1987 |
                                          JJP 62-115280 A
                                   | HCAPLUS
Teijin Ltd
                       |1989 |
                                   1
                                          JJP 01-175999 A
                                                              | HCAPLUS
L68
    ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN
ΑN
     2002:594916 HCAPLUS Full-text
DN
     137:159338
TΙ
     Branched polyalkylene glycols for modification of bioactive peptides
ΙN
     Yamasaki, Motoo; Suzawa, Toshiyuki; Murakami, Tatsuya; Sakurai, Noriko;
     Yamashita, Kinya; Mukai, Mayumi; Kuwabara, Takashi
PΑ
     Kyowa Hakko Kogyo Co., Ltd., Japan
     PCT Int. Appl., 82 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                       KIND
                                DATE
                                          APPLICATION NO.
                                                                   DATE
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                                           ______
                                                                   _____
                                         WO 2002-JP709
     WO 2002060978
                         A1
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2436623
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     EP 1400550
                         A1
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                                            EP 2002-712277
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                            US 2004-470680
     US 2005063936
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                                20050324
                                                                   20040112 <--
PRAI JP 2001-21616
                          Α
                                20010130
                                         <--
    WO 2002-JP709
                                20020130 <--
                          W
AΒ
     Disclosed are branched polyalkylene glycols which comprise at least three single-
     chain polyalkylene glycols bonded to each other and have a group reactive with an
     amino acid side chain, an N-terminal amino group or a C-terminal carboxyl group
     in a polypeptide or a group which can be converted into the reactive group as
     described above attached thereto; and physiol. active polypeptides modified by
     these branched polyalkylene glycols. A three single-chain branched polyethylene
     glycol derivative was prepared from tricine and Me(OC2H5)nNCO. The obtained PEG
     derivative was esterified with N-hydroxysuccinimide, and reacted with recombinant
     human interferon-\beta (rhIFN-\beta) solution The modified rhIFN-\beta showed improved
     antivirus activity in FL cells and blood IFN-\beta concentration in mice as compared
     with unmodified rhIFN-\beta.
ΙT
     445389-35-5DP, esters, reaction products with bioactive peptides
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (branched polyalkylene glycols for modification of bioactive peptides)
RN
     445389-35-5 HCAPLUS
CN
     Poly(oxy-1,2-ethanediyl), \alpha-hydro-\omega-methoxy-, ether with
     2-[[[[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)propyl]amino]carbonyl]oxy]m
     ethyl]-2-[[[[(3-hydroxypropyl)amino]carbonyl]oxy]methyl]-1,3-propanediyl
```

bis[(3-hydroxypropyl)carbamate] (3:1) (9CI) (CA INDEX NAME)

$$CH_2$$
 n OMe CH_2 n OMe n OMe n OMe

RETABLE

Referenced Author (RAU)	Year VOL (RPY) (RVL)		Referenced Work (RWK)	Referenced
(1030)			•	
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Bracco S P A	11997		JS 5807971 A	HCAPLUS
Bracco S P A	1997		DE 860262 A	i
Bracco S P A	1997	\[\bullet	VO 9710281 A	HCAPLUS
Enzon Inc	1995	1 13	JP 09504299 A	İ
Enzon Inc	1995] [JS 5919455 A	HCAPLUS
Enzon Inc	1995	· F	EP 788515 A	HCAPLUS
Enzon Inc	1995		NO 9511924 A	HCAPLUS
Japan Science And Techn	2001	1 13	JP 200164383 A	1
Kyowa Hakko Kogyo Co Lt	2000	1 13	JP 2000191700 A	HCAPLUS
Nof Corp	1998	1 13	JP 10139877 A	HCAPLUS
Nof Corp	1998	1 13	JP 10139878 A	HCAPLUS
Nof Corp	1998] [[JS 5767284 A	HCAPLUS
Nof Corp	1998	ו	JS 5872191 A	HCAPLUS
Nof Corp	1998		DE 69703780 T	1
Nof Corp	1998	E	EP 839849 A	HCAPLUS
Nof Corp	1998	E	EP 839850 A	HCAPLUS
Shearwater Polymers Inc	1999	1 13	JP 2002506087 A	1
Shearwater Polymers Inc] [JS 6111048 A	HCAPLUS
Shearwater Polymers Inc	1999	E	EP 884341 A	HCAPLUS
Shearwater Polymers Inc	1999		NO 9945964 A	HCAPLUS
Supratek Pharma Inc	1999	1 13	JP 2002504519 A	1
Supratek Pharma Inc	1999	ן ן	JS 5698529 A	HCAPLUS
Supratek Pharma Inc	1999	E	EP 619730 A	HCAPLUS
Supratek Pharma Inc	1999		VO 9943343 A	HCAPLUS

L68 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:489516 HCAPLUS Full-text

DN 135:87194

```
TI Branched polyalkylene glycols
```

- IN Yamasaki, Motoo; Suzawa, Toshiyuki; Murakami, Tatsuya; Sakurai, Noriko; Yamashita, Kinya; Mukai, Mayumi; Kuwabara, Takashi; Ohta, So; Miki, Ichiro
- PA Kyowa Hakko Kogyo Co., Ltd., Japan
- SO PCT Int. Appl., 103 pp. CODEN: PIXXD2
- DT Patent
- LA Japanese

FAN.CNT 1

	PATENT NO.			KIND DATE			APPLICATION NO.					DATE						
ΡI	WO	2001	2001048052 A			A1	.1 20010705			WO 2000-JP9159				20001222 <				
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
			HU,	ID,	.IL,	IN,	IS,	JΡ,	ΚE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,
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			ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM					
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			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
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	ΕP	1270	642			A1		2003	0102	1	EP 2	000-	9858	46		20	0001	222 <
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			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
	US	2003	2194	04		A1		2003	1127	į	JS 2	002-	1689	56		20	0020	624 <
PRAI	JΡ	1999	-366	312		Α		1999	1224	<	_							
	WO	2000	-JP9	159		W		2000	1222	<	-							

- AB Branched polyalkylene glycols useful as reagents for chemical modifying physiol. active polypeptides wherein two single-chain polyalkylene glycols are attached to a group having a cyclic structure other than a planar structure and a group reactive with an amino acid side chain, the N-terminal amino group or the C-terminal carboxyl group in a polypeptide or a group which can be converted into such a reactive group is further attached thereto.
- IT 348098-39-5DP, superoxide dismutase conjugate

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(branched polyalkylene glycols for chemical modifying physiol. active polypeptides)

RN 348098-39-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), $\alpha,\alpha'-[[(1\alpha,3\alpha,5\alpha)-5-[2-[[[4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)butyl]amino]carbonyl]oxy]ethyl]-1,3-cyclohexanediyl]bis(2,1-ethanediyloxycarbonylimino-3,1-propanediyl)]bis[<math>\omega$ -methoxy-(9CI)(CA INDEX NAME)

$$-CH_2-O-C-NH-(CH_2)_3-CH_2-CH_2-CH_2-NH-OME$$

IT 348098-39-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(branched polyalkylene glycols for chemical modifying physiol. active polypeptides)

RN 348098-39-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), $\alpha,\alpha'-[[(1\alpha,3\alpha,5\alpha)-5-[2-[[[4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)butyl]amino]carbonyl]oxy]ethyl]-1,3-cyclohexanediyl]bis(2,1-ethanediyloxycarbonylimino-3,1-propanediyl)]bis[<math>\omega$ -methoxy-(9CI)(CA INDEX NAME)

PAGE 1-B

$$-CH_2-O-C-NH-(CH_2)_3-C-CH_2-CH_2-NH-OME$$

RETA	BLE
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Referenced Author (RAU)	(RPY)	VOL (RVL)	(RPG)	, ,	Referenced File
Bracco Spa	-+ 	1	т————— I	JP 11514396 A	
Bracco Spa	i	i	1	IIT 1277596 B	1
Bracco Spa	i	Ì	1	IUS 5807971 A	HCAPLUS
Bracco Spa	Í	,		IAU 717922 B	HCAPLUS
Bracco Spa	i	İ		EP 850262 A	HCAPLUS
Bracco Spa	İ	Ì		ZA 9607759 A	HCAPLUS
Bracco Spa	Ì	ĺ		NO 9801092 A	HCAPLUS
Bracco Spa	1	1	[KR 99044595 A	1
Bracco Spa	1997	1	1	WO 9710281 A	HCAPLUS
Enzon Inc	1	1		WO 9701563 A	HCAPLUS
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Protein Delivery Inc	1	1	1	IL 109619 A	HCAPLUS
Protein Delivery Inc	1	1	1	CN 1120457 A	HCAPLUS
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Protein Delivery Inc	1	1	!	AU 694919 B	HCAPLUS
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Protein Delivery Inc	11996		1	JP 08510255 A	1

L68 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:694179 HCAPLUS Full-text

DN 125:315844

 ${\tt TI}$ Photochemically cross-linked polysaccharide derivatives as supports for the chromatographic separation of enantiomers

IN Francotte, Eric

SO PCT Int. Appl., 36 pp. CODEN: PIXXD2 DT Patent LΑ English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ____ ---------------PΙ WO 9627615 A1 19960912 WO 1996-EP773 19960224 <--W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KP, KR, LK, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG CA 2212057 19960912 AACA 1996-2212057 19960224 <--AU 9649414 A1 19960224 <--19960923 AU 1996-49414 AU 708454 В2 19990805 EP 813546 Α1 19971229 EP 1996-905796 19960224 <--EP 813546 20020717 В1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE CN 1996-192364 CN 1177358 Α 19980325 19960224 <--JP 11509875 Т2 19990831 JP 1996-526567 19960224 <--AT 220691 E 20020815 AT 1996-905796 19960224 <--PT 813546 \mathbf{T} 20021129 PT 1996-905796 19960224 <--T3 A ES 2179935 20030201 ES 1996-905796 19960224 <--

19970904

20060315

20000104

19970905

19950307 <--

19960224 <--

$$RO_{2}C(NH)_{m}X(CH_{2})_{n}N$$

$$R_{2} R_{2}$$

$$R_{2} R_{2}$$

$$N(CH_{2})_{n}X(NH)_{m}CO_{2}R$$

В1

Α

Α

Α

AB The present invention relates to photochem. cross-linked polysaccharide derivs. (I), wherein R is a polysaccharide radical in which the OH groups were esterified or OR' groups or converted into a carbamate (urethane), R1 and R2 are each independently lower alkyl or unsubstituted or substituted aryl, X is a direct bond or phenylene, m is 0 or 1, and n is 0 or an integer from 1 to 20, to processes for the preparation thereof and to the use thereof. (IA) and (IB) can be used as supports in the chromatog. separation of enantiomers.

Ι

FI 1997-3149

US 1997-894976

NO 1997-4092

19970729 <--

19970902 <--

19970905 <--

IT183149-96-4DP, reaction products with 3,5-dimethylphenyl isocyanate and crosslinking 183149-96-4P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of photochem. cross-linked polysaccharide derivs. as supports for chromatog. separation of enantiomers)

RN 183149-96-4 HCAPLUS

FI 9703149

FI 116840

US 6011149

NO 9704092

WO 1996-EP773

MARPAT 125:315844

PRAI CH 1995-640

OS

GΙ

PΑ

Ciba-Geigy A.-G., Switz.

CN Cellulose, [3-(2,5-dihydro-3,4-dimethyl-2,5-dioxo-1H-pyrrol-1yl)propyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 183149-95-3 CMF C10 H14 N2 O4

CM 2

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 183149-96-4 HCAPLUS

CN Cellulose, [3-(2,5-dihydro-3,4-dimethyl-2,5-dioxo-1H-pyrrol-1-yl)propyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 183149-95-3 CMF C10 H14 N2 O4

CM 2

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L68 ANSWER 5 OF 8 USPATFULL on STN AN 2005:74642 USPATFULL Full-text

TI Branched polyalkylene glycols

IN Yamasaki, Motoo, Tokyo, JAPAN
Suzawa, Toshiyuki, Kanagawa, JAPAN
Murakami, Tatsuya, Tokyo, JAPAN
Sakurai, Noriko, Tokyo, JAPAN
Yamashita, Kinya, Shizuoka, JAPAN

DUPLICATE 1

.

Makai, Mayumi, Shizuoka, JAPAN

Kuwabara, Takashi, Shizuoka, JAPAN

PI US 2005063936 A1 20050324

AI US 2004-470680 A1 20040112 (10)

WO 2002-JP709 20020130

PRAI JP 2001-21616 20010130

DT Utility

FS APPLICATION

LREP Lawrence S Perry, Fitzpatrick Cella Harper & Scinto, 30 Rockefeller

Plaza, New York, NY, 10112

CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)

LN.CNT 2699

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a branched polyalkylene glycol wherein three or more single-chain polyalkylene glycols and a group having reactivity with an amino acid side chain, the N-terminal amino group or the C-terminal carboxyl group in a polypeptide or a group convertible into the group having reactivity are bound; and a physiologically active polypeptide modified with the branched polyalkylene glycol.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 445389-35-5DP, esters, reaction products with bioactive peptides

(branched polyalkylene glycols for modification of bioactive peptides)

RN 445389-35-5 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -hydro- ω -methoxy-, ether with

2-[[[[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-

yl)propyl]amino]carbonyl]oxy]methyl]-2-[[[[(3-

hydroxypropyl)amino]carbonyl]oxy]methyl]-1,3-propanediyl

bis[(3-hydroxypropyl)carbamate] (3:1) (9CI) (CA INDEX NAME)

PAGE 1-B

$$CH_2$$
 n OMe CH_2 n OMe n OMe n OMe

```
L68 ANSWER 6 OF 8 USPATFULL on STN
                                                        DUPLICATE 2
       2003:311810 USPATFULL Full-text
ΑN
       Branched polyalkylene glycols
TI
ΙN
       Yamasaki, Motoo, Tokyo, JAPAN
       Suzawa, Toshiyuki, Tokyo, JAPAN
       Murakami, Tatsuya, Tokyo, JAPAN
       Sakurai, Noriko, Tokyo, JAPAN
       Yamashita, Kinya, Shizuoka, JAPAN
       Mukai, Mayumi, Shizuoka, JAPAN
       Kuwabara, Takashi, Shizuoka, JAPAN
       Ohta, So, Tokyo, JAPAN
       Miki, Ichiro, Shizuoka, JAPAN
PΙ
       US 2003219404
                         A1
                               20031127
ΑI
       US 2002-168956
                               20020624 (10)
                          A1
      WO 2000-JP9159
                               20001222
PRAI
       JP 1999-366312
                           19991224
DT
       Utility
FS
      APPLICATION
LREP
      FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
CLMN
      Number of Claims: 16
ECL
       Exemplary Claim: 1
DRWN
       2 Drawing Page(s)
LN.CNT 3707
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       The present invention provides branched polyalkylene glycols useful as a
       chemically modifying agent for physiologically active polypeptides, wherein two
       single-chain polyalkylene glycols are linked to a group having a cyclic
       structure other than a plane structure, and wherein a group having reactivity
       with an amino acid side chain, an N-terminal amino group or a C-terminal
       carboxyl group in a polypeptide or a group convertible into the group having
       reactivity is linked to the group having a structure other than a plane
       structure.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
   348098-39-5DP, superoxide dismutase conjugate
        (branched polyalkylene glycols for chemical modifying physiol. active
       polypeptides)
```

RN

CN

348098-39-5 USPATFULL

(CA INDEX NAME)

Poly(oxy-1,2-ethanediyl), α,α' -[[(1 α ,3 α ,5 α)-

5-[2-[[[[4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-

yl)butyl]amino]carbonyl]oxy]ethyl]-1,3-cyclohexanediyl]bis(2,1-ethanediyloxycarbonylimino-3,1-propanediyl)]bis[ω -methoxy- (9CI)

IT 348098-39-5P

(branched polyalkylene glycols for chemical modifying physiol. active polypeptides)

- RN 348098-39-5 USPATFULL
- CN Poly(oxy-1,2-ethanediyl), α,α' -[[(1 α ,3 α ,5 α)-5-[2-[[[[4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)butyl]amino]carbonyl]oxy]ethyl]-1,3-cyclohexanediyl]bis(2,1-ethanediyloxycarbonylimino-3,1-propanediyl)]bis[ω -methoxy-(9CI)(CA INDEX NAME)

$$-CH_2-O-CH_2-CH_2$$
 O-CH₂ O

```
ANSWER 7 OF 8 USPATFULL on STN
L68
                                                         DUPLICATE 3
       2000:1992 USPATFULL Full-text
AN
ΤI
       Photochemically cross-linked polysaccharide derivatives as supports for
       the chromatographic separation of enantiomers
ΙN
       Francotte, Eric, Nuglar, Switzerland
PA
       Novartis AG, Basel, Switzerland (non-U.S. corporation)
ΡI
       US 6011149
                               20000104
       WO 9627615 19960912
       US 1997-894976
ΑI
                               19970902 (8)
       WO 1996-EP773
                               19960224
                               19970902 PCT 371 date
                               19970902 PCT 102(e) date
PRAI
       CH 1995-640
                           19950307
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Kunz, Gary L.
LREP
       Lopez, Gabriel, Kalinchak, Stephen G.
CLMN
       Number of Claims: 21
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 1064
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
```

The present invention relates to photochemically cross-linked derivatives of general formulae (IA) and (IB), wherein R is a polysaccharide radical in which the OH groups have been esterified as OR' groups or converted into a carbamate (urethane), R.sub.1, and R.sub.2 are each independently lower alkyl or unsubstituted or substituted aryl, X is a direct bond or phenylene, m is 0 or 1, and n is 0 or an integer from 1 to 20, to processes from the preparation

thereof and to the use thereof. The compounds of general formula (IA) and (IB) can be used as supports in the chromatographic separation of enantiomers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 183149-96-4DP, reaction products with 3,5-dimethylphenyl

isocyanate and crosslinking 183149-96-4P

(preparation of photochem. cross-linked polysaccharide derivs. as supports for chromatog. separation of enantiomers)

RN 183149-96-4 USPATFULL

CN Cellulose, [3-(2,5-dihydro-3,4-dimethyl-2,5-dioxo-1H-pyrrol-1-yl)propyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 183149-95-3 CMF C10 H14 N2 O4

CM 2

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE

RN 183149-96-4 USPATFULL

CN Cellulose, [3-(2,5-dihydro-3,4-dimethyl-2,5-dioxo-1H-pyrrol-1-yl)propyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 183149-95-3 CMF C10 H14 N2 O4

CM 2

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE

L68 ANSWER 8 OF 8 USPATFULL on STN 2005:292596 USPATFULL Full-text ΑN ΤI Coatings for medical articles including natural biodegradable polysaccharides ΙN Chudzik, Stephen J., St. Paul, MN, UNITED STATES Chinn, Joseph A., Shakopee, MN, UNITED STATES Swan, Dale G., St. Louis Park, MN, UNITED STATES Burkstrand, Michael J., Richfield, MN, UNITED STATES PΑ SurModics, Inc. (U.S. corporation) PΙ US 2005255142 Α1 20051117 US 2005-127351 20050512 (11) AΙ Α1 PRAI US 2004-570334P 20040512 (60) US 2004-603707P 20040823 (60) US 2004-613662P 20040928 (60) DT Utility FS APPLICATION LREP KAGAN BINDER, PLLC, SUITE 200, MAPLE ISLAND BUILDING, 221 MAIN STREET NORTH, STILLWATER, MN, 55082, US CLMN Number of Claims: 21 ECL Exemplary Claim: 1 No Drawings DRWN LN.CNT 2724 CAS INDEXING IS AVAILABLE FOR THIS PATENT. AΒ Biodegradable coatings that include natural biodegradable polysaccharides are described. The coating is formed from a plurality of natural biodegradable polysaccharides having pendent coupling groups.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 869587-21-3P

(preparation of biodegradable polysaccharide sealant coatings for implantable medical devices)

RN 869587-21-3 USPATFULL

CN Maltodextrin, [5-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)pentyl]carbamate, polymer with 7-methyl-N-[3-[(2-methyl-1-oxo-2-propenyl)amino]propyl]-9-oxo-9H-thioxanthene-3-carboxamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 244202-41-3 CMF C22 H22 N2 O3 S

CRN 79-06-1 CMF C3 H5 N O

CM 3

CRN 869587-19-9 CMF C10 H14 N2 O4 . x Unspecified CDES 8:GD, ESTER

CM 4

CRN 869587-18-8 CMF C10 H14 N2 O4

CM 5

CRN 9050-36-6 CMF Unspecified CCI PMS, MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE

IT 869587-19-9P

(preparation of biodegradable polysaccharide sealant coatings for implantable medical devices)

RN 869587-19-9 USPATFULL

CN Maltodextrin, [5-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)pentyl]carbamate (9CI) (CA INDEX NAME)

CM 1

CRN 869587-18-8 CMF C10 H14 N2 O4

CRN 9050-36-6 CMF Unspecified CCI PMS, MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE

=> => d his

(FILE 'HOME' ENTERED AT 13:44:12 ON 25 SEP 2006) SET COST OFF

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FILE 'HCAPLUS' ENTERED AT 13:44:33 ON 25 SEP 2006
L1
              2 S (US20060009590 OR US20040204548)/PN OR (US2005-091024# OR US2
                E KOZLOWSKI/AU
L2
            162 S E4-E7, E19, E21, E22
                E GROSS/AU
L3
              9 S E3
                E GROSS R/AU
            481 S E3, E11
L4
L_5
              5 S E51, E52
                E MCMANUS/AU
                E MCMANUS S/AU
L6
            138 S E3, E5-E9
                E MC MANUS/AU
                E NEKTAR/PA,CS
L7
             85 S E3-E34
L8
              2 S L1 AND L2-L7
                SEL RN
     FILE 'REGISTRY' ENTERED AT 14:01:50 ON 25 SEP 2006
L9
             55 S E1-E55
             29 S L9 AND NC4/ES
L10
L11
                STR
L12
                SCR 2043
L13
             50 S L11 AND L12 SAM
L14
                STR L11
L15
                STR L11
L16
             50 S L15 AND L12
L17
          16423 S L15 AND L12 FUL
                SAV TEMP L17 RAB751/A
L18
             50 S L11 SAM SUB=L17
L19
           1066 S L11 FUL SUB=L17
                SAV TEMP L19 RAB751A/A
L20
            476 S L19 AND (C2H4O OR C3H6O OR C4H8O OR C5H10O)
L21
            114 S L20 AND S/ELS
L22
                STR L11
              4 S L22 SAM SUB=L19
L23
L24
                STR L22
L25
             43 S L24 SAM SUB=L19
L26
                STR L22
L27
             23 S L26 SAM SUB=L19
L28
            420 S L26 FUL SUB=L19
                SAV L28 TEMP RAB751B/A
L29
                STR L26
L30
             4 S L29 SAM SUB=L28
L31
             49 S L29 FUL SUB=L28
               SAV TEMP L31 RAB751C/A
L32
             31 S L22 FUL SUB=L19
```

```
SAV TEMP L32 RAB751D/A
L33
             0 S L32 AND L31
L34
            17 S L32 AND L28
L35
            14 S L32 NOT L34
L36
             3 S L35 AND 1/NC
L37
             2 S L36 NOT 249621-30-5
L38
           222 S L28 AND L20
          62 S L21 AND L38
L39
L40
             1 S L39 AND "(C2H4O)NC18H32N2O8S"/MF
L41
           160 S L38 NOT L39
L42
            20 S L10 AND L19
L43
             4 S L42 AND L28
L44
             1 S L42 AND L31
L45
             0 S L42 AND L32
            19 S L42-L44 NOT L40
L46
L47
             1 S L46 AND "(C2H4O)NC16H26N2O7"/MF
L48
            10 S L46 AND 46.150.1/RID
               SEL RN 9 10
             8 S L48 NOT E56-E57
L49
L50
             10 S L40, L47, L49
L51
             10 S L42 NOT L50
                SAV TEMP L51 RAB751E/A
     FILE 'HCAOLD' ENTERED AT 14:42:38 ON 25 SEP 2006
     FILE 'HCAPLUS' ENTERED AT 14:42:41 ON 25 SEP 2006
     FILE 'USPATFULL' ENTERED AT 14:46:12 ON 25 SEP 2006
     FILE 'REGISTRY' ENTERED AT 14:46:51 ON 25 SEP 2006
     FILE 'HCAOLD' ENTERED AT 14:47:31 ON 25 SEP 2006
L52
             0 S L50
     FILE 'HCAPLUS' ENTERED AT 14:47:31 ON 25 SEP 2006
L53
              2 S L50
L54
             2 S L53 AND L1-L8
     FILE 'USPATFULL' ENTERED AT 14:48:04 ON 25 SEP 2006
L55
              2 S L50
     FILE 'REGISTRY' ENTERED AT 14:48:12 ON 25 SEP 2006
     FILE 'HCAPLUS' ENTERED AT 14:48:51 ON 25 SEP 2006
     FILE 'USPATFULL' ENTERED AT 14:49:09 ON 25 SEP 2006
     FILE 'REGISTRY' ENTERED AT 14:49:54 ON 25 SEP 2006
L56
             31 S L32 NOT L50
L57
             5 S L56 AND (C2H4 OR C10H14N2O4 OR C18H36)
             13 S L56 AND C2H4O NOT L57
L58
               SEL RN 1 9 10 12
L59
             4 S E58-E61
L60
             9 S L57, L59
L61
             48 S L31 NOT L56, L50
     FILE 'HCAOLD' ENTERED AT 14:55:18 ON 25 SEP 2006
L62
              0 S L60
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FILE 'HCAPLUS' ENTERED AT 14:55:21 ON 25 SEP 2006

L63 7 S L60 L64 0 S L63 AND L1-L8 L65 4 S L63 AND (PY<=2002 OR PRY<=2002 OR AY<=2002) FILE 'USPATFULL' ENTERED AT 14:55:58 ON 25 SEP 2006 L66 4 S L63 L67 3 S L66 AND (PY<=2002 OR PRY<=2002 OR AY<=2002) FILE 'HCAPLUS, USPATFULL' ENTERED AT 14:56:26 ON 25 SEP 2006 L68 8 DUP REM L65 L66 L67 (3 DUPLICATES REMOVED) FILE 'REGISTRY' ENTERED AT 14:56:33 ON 25 SEP 2006 FILE 'HCAPLUS, USPATFULL' ENTERED AT 14:57:49 ON 25 SEP 2006

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